

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* TERRY ALLEN-ROUMAN, JACK MICHAEL ARRINGTON,  
KEVAL EDWIN DESAI, ROBERT EDWIN DRAVENSTOTT,  
WENDY D. LARSON, SCOTT J. LEVOKOVE,  
JOHN JOSEPH MASCAVAGE III, PETER ERIC PHILIPP, and  
MARGARET MORGAN WEICHERT

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Appeal 2007-1683  
Application 09/516,209  
Technology Center 1700

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Decided: July 27, 2007

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Before WILLIAM F. PATE, III, LINDA E. HORNER, and JOSEPH A.  
FISCHETTI, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's rejection of claims 14-18, 24-27, 29-33, 35-37, and 39-46.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF DECISION

We AFFIRM.

## THE INVENTION

Appellants' claimed invention is directed to a method for facilitating an electronic purchase. Claims 14 and 29, reproduced below, are representative of the subject matter on appeal.

14. A method for facilitating an electronic purchase using a funds transfer system, the method comprising steps of:  
    receiving purchase information from a vendor, the purchase information including a purchase price;  
    receiving purchaser information from a purchaser, the purchaser information including an identification of a purchaser account;  
    validating the purchaser information, wherein:  
        if the purchaser information is validated, electronically sending a digital IOU to the vendor, and  
        the digital "I owe you"(IOU) is comprised of the purchase price;  
    and  
    redeeming the digital IOU.

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<sup>1</sup> The Examiner withdrew a rejection of claims 14, 29, 35, and 38 under 35 U.S.C. § 112, second paragraph (Answer 2). As such, there are no outstanding rejections of pending claim 38. Claims 1-13, 19-23, 28, and 34 have been canceled.

29. An electronic transaction method for transferring funds from a user account to a vendor account to compensate the vendor for a purchase selected by a user while accessing a vendor system online and after the user selects from the vendor system a payment option associated with a funds transfer system, the method comprising steps of:

- establishing a connection from the funds transfer system to the user during checkout of the user with the vendor system, wherein the funds transfer system is separate from the vendor system;
- receiving purchase data from the vendor system with the funds transfer system;
- requesting validation from the user for the purchase;
- receiving with the funds transfer system validation information from the user;
- checking the validation information at the funds transfer system against a database; and
- transferring funds from the user account to the funds transfer system if the step of checking the validation information is successful; and
- transferring funds from the funds transfer system to the vendor account.

### THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Doggett	US 5,677,955	Oct. 14, 1997
Kolling	US 5,920,847	Jul. 6, 1999
Rowney	US 5,987,140	Nov. 16, 1999
Walker	US 6,193,155 B1	Feb. 27, 2001
Krishan	US 6,442,529 B1	Aug. 27, 2002

The following rejections are before us for review.

1. Claims 14-18, 24-27, and 39-44 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Doggett and Kolling (Answer 3-5).

2. Claims 29-33 and 35-37 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Doggett, Kolling, and Rowney (Answer 3-6).
3. Claim 45 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Doggett, Kolling, and Walker (Answer 7).
4. Claim 46 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Doggett, Kolling, Rowney, and Krishan (Answer 7-8).

### ISSUES

Appellants contend that the Examiner has not established a prima facie of case of obviousness because (1) the applied combinations do not teach each and every claim element (Appeal Br. 6-11), (2) the combination is based on impermissible hindsight reconstruction (Appeal Br. 7), and (3) one skilled in the art would not be able to combine Doggett and Kolling in the manner suggested with any likelihood of success (Appeal Br. 7). The Examiner found that the applied combinations teach each and every claimed element.

The issues before us are:

1. Whether Appellants have shown that the Examiner erred in rejecting claims 14-18, 24-27, and 39-44 under 35 U.S.C. § 103(a) as unpatentable over Doggett and Kolling.
2. Whether Appellants have shown that the Examiner erred in rejecting claims 29-33 and 35-37 as unpatentable over Doggett, Kolling, and Rowney.
3. Whether Appellants have shown that the Examiner erred in rejecting claim 45 as unpatentable over Doggett, Kolling, and Walker.

4. Whether Appellants have shown that the Examiner erred in rejecting claim 46 as unpatentable over Doggett, Kolling, Rowney, and Krishan.

#### FINDINGS OF FACT

The relevant facts include the following:

1. Doggett teaches a computer-based method for creating an electronic instrument for effecting a transfer of funds from an account of a payer in a funds-holding institution to a payee (Doggett, Abstract).
2. The electronic instrument includes an electronic signature of the payer, digital representation of payment instructions, the identity of the payer, the identity of the payee, and the identity of the funds-holding institution (Doggett, Abstract and col. 3, ll. 13-18).
3. Doggett teaches that a transaction is initiated when a payer 12, e.g., a consumer, electronically receives a memorandum of a proposed transaction 66, such as a bill, invoice or order form, from a payee/merchant 14 (Doggett, col. 7, 39-43).
4. To proceed with the transaction, the payer 12 electronically creates a financial instrument 74, e.g., an electronic check, and signs and records it using the payer's secure authenticator 70 (Doggett, col. 7, ll. 49-53). The Examiner found the electronic instrument 74 in Doggett to be a digital IOU (Office Action 4 (mailed June 16, 2005)). The Specification describes a digital IOU as an authorization issued to the vendor "that will allow the vendor to redeem the digital IOU and receive funds therefor at a later time"

(Specification 22: 23-24). The electronic digital instrument 74 in Doggett can be redeemed by the vendor only after the vendor electronically deposits it with the vendor's banking institution (Doggett, col. 8, ll.15-18). Thus, both the electronic instrument 74 in Doggett and the claimed digital IOU similarly operate to allow the vendor/merchant to redeem the amount authorized by the instrument at a later time from when first issued to the vendor/merchant.

5. The electronic check can be pre-formatted by the payee with the amount, "pay to the order of," and payer's public key lines already completed, allowing the payer to enter minimal information into the body of the electronic check before signing it (Doggett, col. 9, ll. 55-59).

6. After the electronic instrument 74 is validated (i.e., signed) by the secure authenticator 70, the payer 12 electronically sends the instrument 74 and the memorandum 64 to the payee 14 (Doggett, col. 7, ll. 53-64).

7. The payee 14, upon receipt of the instrument 74, validates the payee's digital signature, verifies that the instrument is not a duplicate, endorses the instrument, and electronically deposits the instrument for collection (Doggett, col. 7, ll. 65-67 and col. 8, ll. 1-18).

8. Point of Service (POS) devices are terminals which allow access to an individual's account information from a remote location, such as a merchant's place of business, to permit transfer of funds from the user's account to the merchant's account (Doggett, col. 2, ll. 46-50).

9. The customary meaning of the term "validate" is to make legally

valid; or to grant official sanction to by marking. *Merriam-Webster's Collegiate Dictionary* 1362 (11th ed. 2005).

10. Kolling discloses an electronic bill payment system (Kolling, col. 1, ll. 14-15).

11. Participating consumers receive bills from participating billers (paper/mail bills, e-mail notices, implied bills for automatic debit etc.) which indicate an amount, and a unique biller reference number (BRN) identifying the biller to the payment network (Kolling, col. 11, ll. 14-18).

12. To authorize a remittance, the consumer transmits a transaction indicating an amount to pay, the source of the funds, a payment date, the consumer's account number with the biller, and the biller's BRN to the payment network (Kolling, col. 11, ll. 20-25).

13. The system allows bidirectional message flow, i.e., messages can flow back to the consumer in addition to messages flowing from the consumer. To allow for proper routing of messages back to the consumer, each participating consumer is assigned a unique participant ID (Kolling, col. 12, ll. 29-33).

14. This bidirectional messaging allows additional services to be offered. For example, billers can specify certain data fields as being required and the bill payment system is programmed to return payment messages which contain insufficient data or incorrectly formatted data. Billers can also specify that, for legal reasons, they choose not to accept payments from specific consumers or payments made after certain dates (Kolling, col. 12,

ll. 33-42).

15. These biller requirements are stored in a database (Kolling, col. 12, ll. 42-44).

16. Kolling teaches the verification of funds and notification of insufficient funds to the payer (Kolling, col. 26, ll. 31-35 and Fig. 11, steps 254 and 256).

17. The verification of funds prior to initiating a funds transfer and providing insufficient fund notifications/messages, where applicable, is well known in the financial arts as evidenced by Kolling's known systems which utilize non-sufficient funds (NSF) notices (Kolling, Fig. 7).

#### PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) secondary considerations, where in evidence. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*,



127 S.Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 127 S.Ct. at 1739, 82 USPQ2d at 1395 (citing *Graham*, 383 U.S. at 12, 148 USPQ at 464 (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* The Court explained:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*Id.* at 1740, 82 USPQ2d at 1396. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

The Supreme Court stated that “[f]ollowing these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *Id.* The Court explained, “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41, 82 USPQ2d at 1396. The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.*, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.*

#### ANALYSIS

*Rejection of claims 14-18, 24-27, and 39-34 as unpatentable over Doggett and Kolling*

Appellants argue claims 14-18 as a group (Appeal Br. 6). We select claim 14 as a representative claim, and the remaining claims of the group stand or fall with claim 14. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

Appellants contend that the combination of Doggett and Kolling does not teach or suggest “receiving purchaser information from a purchaser, the purchaser information including an identification of a purchaser account” as recited in claim 14 (Appeal Br. 6). More specifically, Appellants contend that “[a]s is plainly shown in Fig. 3 of Doggett, the memorandum of proposed transaction 66 passes from the payee to the payor/purchaser. This is the wrong direction for this information to travel to anticipate this claim limitation” (Appeal Br. 7). The Examiner found that “elements 66 and 74 [of Doggett] taken in totality” (Answer 8) teach receiving purchaser information from a purchaser as recited in claim 14. We agree with the Examiner.

Doggett teaches that the memorandum of a proposed transaction 66, such as a bill, invoice or order form, is received by the payer from, for example, a merchant (Finding of Fact 3). In response, the payer 12 creates the electronic instrument 74, which includes, *inter alia*, the payer’s account number (Finding of Fact 4). Therefore, although the memorandum may pass from the payee to the payer, the electronic check, i.e., instrument 74, clearly passes from the payer/purchaser to the payee/merchant, thereby satisfying the “receiving purchaser information from a purchaser” limitation of claim 14.

Appellants further contend that the combination of Doggett and Kolling is based on impermissible hindsight reconstruction (Appeal Br. 7).

The use of hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is impermissible. See, for example, *W. L. Gore and Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). However, obviousness judgments are necessarily based on hindsight, but so long as judgment takes into account only knowledge known in the art, there is no impermissible use of hindsight. *In re McLaughlin*, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

The verification of funds prior to initiating a funds transfer and providing insufficient fund notifications/messages, where applicable, is well known in the financial arts as evidenced by Kolling's known systems which utilize non-sufficient funds (NSF) notices (Findings of Fact 16, 17). Furthermore, Kolling specifically teaches verifying funds availability and informing the payor/consumer if there are insufficient funds (Finding of Fact 16). The Examiner held that it would have been obvious to one of ordinary skill in the art to include means for providing non-sufficient funds notification messages as taught by Kolling in the system of Doggett (Answer 5). This combination or modification of Doggett using known functionality (i.e., NSF messages) to provide expected (i.e. predictable) results (verification and notification of insufficient funds) is an obvious combination. *KSR*, 127 S.Ct. at 1739, 82 USPQ2d at 1395 ("the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.") As such, we find that the Examiner's reliance on knowledge known in the art to be proper.

Finally, Appellants contend that one skilled in the art “would not be able to combine these references [i.e., Doggett and Kolling] in the suggested manner with any likelihood of success” (Appeal Br. 7). However, Appellants provide no evidence that the system of Doggett is incapable of providing non-sufficient funds messages as suggested by the Examiner. Although the combination of both systems into a single system may, *arguendo*, require substantial effort to design and implement, there is no evidence that the suggested modification to Doggett (i.e., inclusion of NSF messages) is beyond the capabilities of one of ordinary skill in the art. As such, we sustain the Examiner’s rejection of claims 14-18 as unpatentable over Dogget and Kolling.

Appellants argue claims 24-27 as a group (Appeal Br. 8). We select claim 24 as a representative claim, and the remaining claims of the group will stand or fall with claim 24. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

Appellants contend that the combination of Doggett and Kolling does not teach or suggest “notifying the payor that the payment information is not valid” as required by claim 24 (Appeal Br. 8). The Examiner found that Kolling discloses “when the purchaser information is not validated (figure 7), a message is sent to the purchaser (46) and the purchaser is added to a database” (Answer 5).

Appellants contend that “[t]he NSF notice 46 corresponds to the arrows 8, 10, 12 from the Bank C back to the Biller or payee 14” (Appeal Br. 8) resulting in notifying the payee not the payor as claimed. Although we agree that the NSF notice of figure 7 illustrates notification to the payee, Kolling further discloses that the consumer or payer is notified or informed when there are insufficient funds to

cover a requested payment as illustrated in step 256 of Figure 11 (Finding of Fact 16). As such, we sustain the Examiner's rejection of claims 24-27 as unpatentable over Doggett and Kolling.

Appellants argue claims 39-44 as a group (Appeal Br. 9). We select claim 39 as a representative claim, and the remaining claims of the group will stand or fall with claim 39. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

Appellants contend that the combination of Doggett and Kolling does not teach or suggest (1) "notifying the payor that the payment information is not valid," (2) a "database that has purchaser information and vendor information" and (3) "comparing payment information and purchase information against the database" (Appeal Br. 9). We disagree.

Kolling discloses a payment system which allows bidirectional message flow, i.e., messages to and from the payor (Finding of Fact 13). More specifically, Kolling teaches that using this bidirectional message flow to inform/notify a payor if there is insufficient or incorrectly formatted data contained within a transaction (i.e., if the payment information is not valid) (Finding of Fact 14). Furthermore, Kolling teaches that the information needed to validate the transactions, for example, the biller's BRN and the consumer's account number with the biller, are stored in a database (Finding of Fact 15). Finally, Kolling teaches determining, i.e., comparing against stored data, if the BRN and C-B account numbers are valid (see step 260 of Fig. 11) (Finding of Fact 16). Therefore, the combination of Doggett and Kolling satisfies the limitations of claim 39. As such, we sustain the Examiner's rejection of claims 39-44 as unpatentable over Doggett and Kolling.

*Rejection of claims 29-33 and 35-37 as unpatentable over Doggett, Kolling, and Rowney*

Appellants argue claims 29-33 as a group (Appeal Br. 10-11). We select claim 29 as a representative claim, and the remaining claims of the group will stand or fall with claim 29. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

Appellants appear to contend that the combination of Doggett, Kolling, and Rowney does not teach or suggest “the ‘requesting’ and ‘receiving’ steps of claim 29” (Appeal Br. 11). The Examiner found that Doggett “discloses information required to be inputted into the system by all parties, thus meeting the recitation to [*sic*, of] requesting and receiving” (Answer 8).

Claim 29 recites, *inter alia*, “receiving purchase data from the vendor system with the funds transfer system; requesting validation from the user for the purchase; [and] receiving with the funds transfer system validation information from the user.” Doggett teaches receiving the memorandum of proposed transaction 66, such as a bill, invoice or order form, from a payee/merchant (Finding of Fact 3). Doggett further teaches after the electronic instrument is validated (i.e., signed) by the secure authenticator 70, the payer 12 electronically sends the instrument 74 and the memorandum 66 to the payee 14 (Finding of Fact 6). The customary meaning of the term validate is to make legally valid; or to grant official sanction to by marking (Finding of Fact 9). Therefore, Doggett teaches requesting validation and receiving validation information in as much as Dogget teaches that the instrument (i.e., validation information) is validated by secure authenticator 70. Accordingly, the applied combination satisfies the

requesting and receiving steps of claim 29. As such, we sustain the Examiner's rejection of claims 29-33 as unpatentable over Doggett, Kolling, and Rowney.

Appellants argue claims 35-37 as a group (Appeal Br. 11). As such, we select claim 35 as a representative claim, and the remaining claims of the group will stand or fall with claim 35. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

Appellants appear to contend that the combination of Doggett, Kolling, and Rowney does not teach or suggest "the 'requesting' and 'receiving' steps" of claim 35 (Appeal Br. 11). We disagree.

Claim 35 recites, *inter alia*, receiving purchase information including a purchase price from the vendor system; requesting payment information from the user; and receiving payment information from the user.

Doggett teaches receiving a memorandum of proposed transaction 66, such as a bill, invoice or order form, from a payee/merchant (Finding of Fact 3). Doggett further teaches after the payer 12 electronically sends instrument 74, which includes payment information, to the payee 14 (Finding of Fact 2 & 6). Accordingly, for the same reasons discussed *supra* for claim 29, the applied combination satisfies the requesting and receiving steps of claim 35. As such, we sustain the Examiner's rejection of claims 35-37 as unpatentable over Doggett, Kolling, and Rowney.

*Rejection of claim 45 as unpatentable over Doggett, Kolling, and Walker*

Appellants contend that claim 45 is patentable over the combination of Doggett, Kolling, and Walker for the reasons presented with respect to claim 24



(Appeal Br. 11). More specifically, Appellants contend that the combination fails to teach or suggest “notifying the payor that the payment information is not valid” as required by claim 24 (Appeal Br. 8). We disagree for the same reasons presented, *supra*, with respect to claim 24. As such, we sustain the Examiner’s rejection of claim 45 as unpatentable over Doggett, Kolling, and Walker.

*Rejection of claim 46 as unpatentable over Doggett, Kolling, Rowney, and Krishan*

Appellants contend that claim 46 is patentable over the combination of Doggett, Kolling, Rowney, and Krishan for the same reasons presented with respect to claim 29 (Appeal Br. 11). More specifically, Appellants contend that the combination fails to teach or suggest “the ‘requesting’ and ‘receiving’ steps of claim 29” (Appeal Br. 11). We disagree for the same reasons presented, *supra*, with respect to claim 29. As such, we sustain the Examiner’s rejection of claim 46 as unpatentable over Doggett, Kolling, Rowney, and Krishan.

#### CONCLUSIONS OF LAW

We conclude that Appellants have not shown that the Examiner erred in rejecting claims 14-18, 24-27, and 39-44 under 35 U.S.C. § 103(a) as unpatentable over Doggett and Kolling, claims 29-33 and 35-37 as unpatentable over Doggett, Kolling, and Rowney, claim 45 as unpatentable over Doggett, Kolling, and Walker, and claim 46 as unpatentable over Doggett, Kolling, Rowney, and Krishan.

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DECISION

The Examiner's decision under 35 U.S.C. § 103(a) to reject claims 14-18, 24-27, and 39-44 as unpatentable over Doggett and Kolling, claims 29-33 and 35-37 as unpatentable over Doggett, Kolling, and Rowney, claim 45 as unpatentable over Doggett, Kolling, and Walker, and claim 46 as unpatentable over Doggett, Kolling, Rowney, and Krishan is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED

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